## REMARKS

Claims 7, 10, 12-20, 22, and 24-32 are pending. Claims 7, 13, 20, 22, and 28 have been amended. Claims 8, 11, 21, and 23 have been cancelled. Applicants reserve the right to pursue the original and other claims in this and any other application.

Claims 7, 8, and 10-32 stand rejected under 35 U.S.C. 102(b) as being anticipated by Moezzi et al. (U.S. Patent 5,850,352) ("Moezzi"). Claims 8, 11, 21, and 23 have been cancelled, rendering the rejection moot with respect to these claims. With respect to the remaining claims, the rejection is respectfully traversed.

Claim 7 recites a "method for virtually navigating an environment in three dimensions" comprising, "defining virtual paths in the environment; capturing images of the environment from a plurality of cameras; receiving a navigation request; generating a plurality of synthetic images corresponding to viewpoints along the previously defined virtual paths; and transmitting a sequence of synthetic images corresponding to viewpoints along the virtual path that most closely matches the navigation request...."

The claimed invention allows users to virtually navigate a three dimensional environment representative of a real-world space. This is accomplished by "defining virtual paths in the environment" and "capturing images of the environment from a plurality of cameras" arranged in the environment. By "generating a plurality of synthetic images corresponding to viewpoints along the previously defined virtual paths," the claimed invention allows users to "see" the environment from perspectives and positions for which there is no corresponding camera. Generating these "synthetic images" is computationally complex and, as explained in Applicants' specification, quickly becomes impractical as the number of simultaneous users increases. By limiting the synthetic images "to viewpoints along the previously defined virtual paths," however, the computational burden is dramatically reduced because, no matter how many simultaneous users are virtually navigating the environment, the number of viewpoints from which synthetic images must be generated remains fixed. By selecting a predefined virtual path

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"that most closely matches the navigation request," the claimed invention provides an illusion of free movement within the environment while actually constraining users to movement along the predefined virtual paths.

Moezzi is superficially similar to the claimed invention in that Moezzi also aims to allow users to virtually navigate a three dimensional environment. Moezzi fails, however, to disclose the notion of constraining user movement "to viewpoints along the previously defined virtual paths," as claimed. In fact, Moezzi teaches just the opposite – that "a viewer should be able to view the events from anywhere." (Column 42, Lines 39-40) See also, column 9; lines 58-67; column 36 at lines 32-34; column 36 at lines 39-44; and column 41, lines 4-9. Restricting users to predefined virtual paths, as claimed, is very different than allowing users to "view the events from anywhere," as taught by Moezzi.

Moezzi recognizes the computational complexity problem but teaches an entirely different solution. "Voxels have been traditionally vilified for their extreme computing and storage requirements. ... However for efficiency considerations and elegance, it is herein discussed how storage and computing requirements can greatly be reduced using certain assumptions and optimization." (Column 37, Lines 44-55) "One basic assumption is that motion is restricted to a small subset of the total three dimensional space and the static portion of the world is known a priori." (Column 37, Lines 56-58) "First, the dynamic objects are assumed to be limited in their vertical extent." (Column 38, Lines 1-2) "Second, bounds are put on where the objects may be at the current time instant based on prior state, tracking information, assumptions about surfaces of motion etc." (Column 38, Lines 5-8) In other words, Moezzi assumes objects within the environment will behave in a certain way, thus reducing the computational complexity of generating the synthetic image of the environment. Restricting the movement of objects within a synthetic image, as in Moezzi, however, is very different than limiting the synthetic images "to viewpoints along the previously defined virtual paths," as claimed. Stated another way, Moezzi places restrictions on objects within the environment,

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whereas the claimed invention restricts the perspectives and positions from which synthetic images can be generated to a predefined pathway.

For at least these reasons, claim 7 is believed to be allowable over Moezzi. Therefore, the rejection of claim 7 should be withdrawn.

Claims 10, 12, and 29 depend from claim 7 and are believed to be allowable over Moezzi for at least the reasons stated above with respect to claim 7 and on their own merits. Therefore, the rejection of claim 10, 12, and 29 should be withdrawn.

Claim 13 and 20 recite similar limitations as those of claim 7 quoted above and are believed to be allowable over Moezzi for at least the reasons stated above with respect to claim 7 and on their own merits. Therefore, the rejection of claims 13 and 20 should be withdrawn.

Claims 14-19, 30, and 31 depend from claim 13 and are believed to be allowable over Moezzi for at least the reasons stated above with respect to claim 13 and on their own merits. Therefore, the rejection of claims 14-19, 30, and 31 should be withdrawn.

Claims 22, 24-28, and 32 depend from claim 20 and are believed to be allowable over Moezzi for at least the reasons stated above with respect to claim 20 and on their own merits. Therefore, the rejection of claims 22, 24-28, and 32 should be withdrawn.
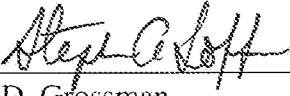
If the Examiner believes it would be useful, Applicants' representative would welcome the opportunity to explain the distinctions between the claimed invention and the Moezzi reference through an in-person or telephonic interview. The Examiner is invited to telephone the undersigned to schedule an interview prior to issuance of a next Office Action.

In view of the above, Applicants believe the pending application is in condition for allowance and respectfully request that it be passed to issue.

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Respectfully submitted,

By _____ Reg. No. 31,063

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